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ABSTRACT

An endless debate in social science research focuses on whether or not there is a philosophical basis for justifying the application of scientific methods to social inquiry. A review of the philosophies of various scholars in the field indicates that there is no single procedure for arriving at a valid statement in a scientific inquiry. Natural scientists employ a plethora of procedures for validating or rejecting the hypotheses guiding their investigations. There are various theories as to how knowledge can correspond with an observable reality. Theorists with a positivistic attitude minimize the differences between the natural and social sciences and exclude metaphysics from scientific investigation. Interpretive theorists argue that people's life-worlds are quite different from the world of natural science and therefore, should be investigated differently. Validity is determined on the basis of intersubjective understanding and acceptability. Critical theorists have a different orientation. They look beyond the descriptions of structured social relations and emphasize, instead, the use of knowledge. It is concluded that recent attempts to reconcile different approaches to research must be discounted. Instead, students in the social sciences must be provided with a grounding in the diverse perspectives on the nature of the social world, in order to understand the independence and the interrelatedness of the various modes of inquiry. (KA)

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THE RELATIONSHIP BETWEEN METHOD AND VALIDITY IN
SOCIAL SCIENCE RESEARCH

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Introduction

We are here to continue some conversations. Those conversations have to do with the so-called "qualitative-quantitative" debate on research in education. We are doctoral students in educational administration at the University of Alberta. From time to time during our careers there we have been drawn into such a debate. We were drawn in at first with irritation, then at times with resignation, at times with anticipation, and right this minute with much hesitation.

We have endured our own pilgrims' progress, Readers' Digest edition. We have stumbled through words like "epistemology" and "paradigm." We have pored over Burrell and Morgan. We have shifted our attention from Bloom's taxonomy of knowledge to Gilbert Ryle's (1949:28) ways of knowing. We no longer reach for a dictionary of philosophy each time we come across the word "ontology," and good ole' Burrell and Morgan rests in peace on our bookshelves. Even so, we remain pilgrims. Can it be that we still seek something to believe in?

As junior researchers struggling to keep our feet grounded and our heads above the abstractions, we have tried to sort out the implications of various perspectives for our own research endeavours. Of late, we have fixed our attention on the question of the relations between method and validity. Abusing Gilbert Ryle's distinction between knowing that and knowing how, we know that, for example, Peter Berger (1963:13) said "in science as in love a concentration on technique is quite likely to lead to impotence." But we don't know how much is too much ... Moreover, we recognize that even this reference to "the literature" makes it advisable for us to begin defining our

We gratefully acknowledge the assistance of Raymond Morrow, Department of Sociology, University of Alberta, in the preparation of this paper.

terms and modulating our tone.

We wish, then, to add our voice to certain conversations that have been exploring the notions of method and validity, and the connection between the two. In particular, we refer to a conversation initiated by Gareth Morgan in a workshop at York University in 1981 and in a subsequent book entitled Beyond Method (1983). Morgan brought together a group of social scientists who among them hold a wide range of approaches to their research. He asked each of them to make explicit his or her research rationale and practices. And he proposed "reflective conversation" as a "model of inquiry and research education" for the continuing exchanges of viewpoints (Morgan, 1983a:406).

We refer also to a recent article by Smith and Heshusius (1986). In that article they deplore the "closing down" of conversation debating the qualitative/quantitative issue for research in education. These authors argue that there has been premature closure of the debate primarily because of a false notion that the two approaches are compatible. They claim that the current situation is "actually a matter of the 'capture' of qualitative inquiry by the quantitative approach" (Smith and Heshusius, 1986:10). The case that they present is a valuable corrective to our own unreflective lapses (or is it a retreat?) into positivistic thinking.

We find it rather intimidating to enter the conversations we have mentioned. Nonetheless, we agree with these authors that the issues are of fundamental importance and that conversation should continue. So here goes.

The purpose of this paper is to consider the changing role of method with respect to the assessment of validity in social science research. Referring primarily to sociological literature, we trace recent historical developments concerning these relations. To do that, we

identify certain theorists whose work illustrates key points within this area of thought. We have divided our review into three sections, which we call "Towards Method," "Method Re-examined" and "Critical Reflection as Method." Then, in the concluding section, we argue for the coexistence of different methods as components of a critically oriented social science.

First, let us clarify the way that we use various terms. By "method" we mean a "logic of justification" (Smith and Heshusius, 1986:8). By "logic of justification" we mean a set of ontological and epistemological assumptions that determine how a researcher sees the world; what questions that researcher asks; and, ultimately, the ways in which the researcher investigates those questions and assesses the findings. Findings are "valid" if they are regarded by some identifiable social-scientific community as credible and defensible. We choose to avoid the terms "qualitative" and "quantitative." It seems to us that these two serviceable mini-van words have been stretched into omnibus terms, each one carrying an indeterminate load of passengers. As a result, use of the terms contributes to confusion rather than clarification. In keeping with the focus of this paper, we choose instead to stay with the ontological and method-oriented contrasts that are associated with the terms "positivistic" and "interpretive."

Towards Method

That the investigation of social phenomena has been greatly influenced by the modes of scientific inquiry is a well documented fact. Endless debate has focused on the philosophical basis for justifying the application of scientific methods to social inquiry. This debate has frequently distorted both the central concepts and whole

schools of thought. Of special note in this regard - and a concept of interest to this discussion - is the term "positivism," a designation derived from Auguste Comte's phrase, "positive philosophy." Giddens (1974:2) claims that this term "has been used so broadly and vaguely as a weapon of critical attack ... that it has lost any claim to an accepted and standard meaning." It is beyond the scope of this paper to attempt an exploration of the nature of positivism in either philosophy or sociology, nor would any such attempt be likely to add much to what has already been stated numerous times over. But it is useful to borrow Giddens' concept of a "positivistic attitude" to begin our discussion of how valid knowledge has been defined from this perspective.

Giddens (1974:3-4) states that a positivistic attitude includes three related suppositions. First, the methodological procedures of the natural sciences may be applied to the study of social phenomena. Secondly, the outcome of these inquiries may be constructed as "laws" or "law-like" generalizations. And thirdly, that these outcomes have no logically inherent implications for policy or for the pursuit of any particular values. That is, sociology, like the natural sciences, is neutral. For the purposes of this discussion, the first supposition is of primary interest.

To assert that there is a single procedure for arriving at a valid statement in a scientific inquiry is obviously false. Natural scientists employ a plethora of procedures for validating or rejecting the hypotheses guiding their investigations. But while the details of procedure may vary, Hempel (1965:82-83) explains that the generation of "objective scientific knowledge" (as distinguished from what Nagel [1961:2] refers to as "prescientific" or "commonsense" knowledge) follows a fundamental framework and logic, all of which hinges on empirical verification. Scholars adopting the positivistic

attitude reject the metaphysical and assert that all valid knowledge must correspond with an observable reality. Phenomena that elude direct observation (and there are many in both the natural and social sciences) may be verified through indirect inference. This involves the construction of tests which, if the original supposition is correct, will result in some observable phenomena. If, through repeated testing, these predicted phenomena are found to exist, the hypothesis is accepted. If not, the hypothesis is rejected (Hempel, 1965:82-83).

In constructing a *scientific explanation* of certain phenomena, Hempel (1965:247-251) asserts that such an explanation must meet both "logical" and "empirical" conditions of adequacy. Three logical conditions of adequacy are stipulated: 1. the phenomena described must be logically deduced from the antecedent conditions and existing general laws which cover the subject matter; 2. the conditions from which the phenomena are deduced must contain general laws; and 3. the antecedent conditions and laws must be capable of being tested by experimentation or observation, i.e., they must have an empirical content. Simply stated, these logical conditions of adequacy assert that the phenomena described must make sense in relation to the relevant existing knowledge. The empirical condition of adequacy is that all antecedent conditions and laws from which the phenomena are deduced must be true. "True," of course, means true in the sense of having been verified through the application and repetition of appropriate tests.

The verifiability theory of meaning - that a statement is meaningful only if empirical evidence can be offered to verify it - has had a controversial history. Debate has centered on whether conclusive verification is possible. Falsificationists have argued that a hypothesis can only be shown to be false. Prominent in this group is the Austrian-born philosopher Sir Karl Popper. He argues that falsification is logically possible. He admits, however,

that *methodologically* it is problematic, for there may always be some reason to doubt the disproving evidence (Magee, 1973:15). The principle of verification has now been rejected by philosophers. Nevertheless, it still retains credibility among many social scientists (Phillips, 1983:5).

This debate aside, both verificationists and falsificationists agree that knowledge is accumulated through the generation of new insights and the elimination of old hypotheses (Burrell and Morgan, 1979:5). They also agree that this process takes place by following rigorous scientific procedures. They also agree that there is a necessary connection between the validity of knowledge and the application of accepted methods in its generation.

The positivistic attitude is well exemplified in one particular work by Emile Durkheim¹ (1858-1917), a noted French sociologist. In The Rules of Sociological Method (1938) he clearly justifies the existence of sociology (by distinguishing it from psychology). He details not only *what* sociologists should study, but *how* they should go about investigating it.

Durkheim justifies the existence of social inquiry by claiming the existence of what he terms "social facts." For something to qualify as a social fact it must meet two criteria. First, it must exist throughout society (clearly separating it from the psychological). Secondly, it must exist external to the individual yet be capable of imposing itself on him or her (Durkheim, 1938:13). Durkheim contends

¹ While Durkheim is frequently cited as an exemplar of positivism, Steven Lukes, in his comprehensive work Emile Durkheim, makes it clear that Durkheim's position on the study of social life varied throughout his lifetime. Many of his later works reveal much that is non-positivistic. We have chosen to focus on Durkheim here because *what* he says in The Rules of Sociological Method is a good example of a positivistic approach to social science. We do not wish to suggest that this typifies his other works.

that social facts, such as moral maxims, comprise an external reality that exist independently of individual will and action. In detailing a method of social investigation, Durkheim (1938:14) stipulates that "the first and most fundamental rule" is to treat social facts as "things."

On the subject of method, Durkheim also establishes three corollaries to guide an investigation (Durkheim, 1938:31-46). The first is that the scientist must cast aside all preconceptions about the subject of the inquiry. Only concepts having scientific validity can form the basis of a sociological study. While he recognizes that sentiment and emotions may be problematic, he dismisses them as "strong but confused states of mind." The second directs the scientist to confront social facts objectively. That is, they must be dealt with on the basis of their inherent characteristics, and these must be clearly defined beforehand. Scientists proceeding thus are, in his view, "firmly grounded in reality." The third corollary elaborates on what he sees as a potential problem with the second. Since objects can only be recognized through sense perception, scientific and lay concepts share a similar origin, differentiated only in that lay concepts lack the disciplined investigation of scientific ones. But sense perception - sensation - may be subjective. Thus Durkheim, in this third corollary, exhorts scientists to study social facts in a way which is separate from how they are manifested individually. That is, the study must focus on the forms of collective (not individual) habits. He cites legal rules and moral regulations as examples (Durkheim, 1938:45).

Taken together, this perspective on the study of social phenomena and the establishment of social facts points to a strong reliance on scientific investigation as a means of validation. For Durkheim, everyday beliefs and lay concepts played no role in the study of social life. Realism and determinism are the foundation for a social

scientific method.

Of course, to attempt to characterize a positivistic attitude by alluding to a single writer is to ignore the diversity of thought which has been classified under the rubric of positivism. Nevertheless, there are some assertions which tend to be classified as "positivistic," and which are evident in the work of Durkheim. One of the more significant is the tendency to reject concepts and claims which lie beyond the scope of empirical verification. As Bredo and Feinberg (1982:15) point out, positivists make great efforts to exclude metaphysical statements from scientific inquiry. Essentially, all statements which fall outside of the realm of verification are viewed as meaningless. The positivism of Durkheim has had a significant impact on North American positivism. This impact is succinctly stated by Keat and Urry (1982:90):

From the 1930s to the 1960s American social science has been largely positivist. Its predominant concerns have been the establishment of general laws of social life from which empirically testable consequences can be derived; operationalizing concepts such that they refer to the observable and especially to the measurable; and the statistical manipulation of naively collected and organized empirical data.

The positivistic attitude is grounded in a commitment to realism. That is, realist belief in the existence of a world "out there," one that is independent of any person's awareness or understanding of it. Researchers with a positivistic attitude seek to achieve valid knowledge about that world through the application of specific investigative procedures which are understood to constitute the "scientific method." These techniques and procedures are, as Smith and Heshusius (1986:9) put it, "epistemologically priveleged" and "stand separate from and prior to the conduct of any particular piece of research." In short,

certain procedures guarantee validity and the validity of findings is dependent on adherence to conventionally accepted procedures.

Method Re-examined

Burrell and Morgan (1979:228) note that during the period 1890-1930, there arose a number of significant challenges to the prevailing positivistic attitude. In general, these challenges had as their foundation a commitment to idealism. The introduction of the idealist philosophy as an alternative orientation towards the social sciences promoted a significant change in focus. Attention shifted from the investigation of an objectively real social world to an interest in understanding how individuals interpret the social world in which they participate. As Giddens (1977:135) points out, it is this emphasis on interpretive understanding - verstehen - that is the unifying element among idealists.

According to Rickman (1967:403-407), Wilhelm Dilthey (1833-1911) argued that the cultural (or social) sciences are distinct and separate from the natural sciences. His position was that the cultural sciences should be concerned with deriving objective scientific knowledge of individuals' intentions and meanings. To this end cultural science investigation should be guided by existing procedural conventions from the natural sciences and the humanities. He stressed, in particular, the adaptation of hermeneutics to the cultural sciences. In addition, the process of "das verstehen" is employed to make sense of individuals' actions. This process of interpretive understanding is possible in the first instance because the cultural scientist is familiar with the human intellect and emotions, and their expression. As well, verstehen is conditional on the scientist's awareness of the specific situation and

overall socio-historical context in which given actions occur. If these criteria for verstehen are met, the cultural scientist's findings will be scientific and valid.

Max Weber (1864-1920) developed Dilthey's notion of verstehen into a set of procedures. By structuring and systematizing the process of interpretive understanding, he was attempting to account for human subjectivity within the positivistic attitude. He (Weber, 1974) argued that the existence of a subjective component to human behaviour does not mean that such behaviour is necessarily irrational or "incalculable." Weber contends that "free will" may be understood as the extent to which an actor relates means to ends. Given this rational - and therefore predictable - conduct, the process of verstehen involves interpreting observed actions in relation to the actors purpose (Mennell, 1974:23). The social scientist then develops ideal types or constructs that account for certain human actions and relations (Burrell and Morgan, 1979:231). This analysis is then verified scientifically by means of statistical or case comparisons (Mennell, 1974:23).

Edmund Husserl (1859-1938), on the other hand, dismissed the natural sciences as a model for studying the social world, which he regarded as entirely separate. Husserl emphasized the investigation of the life world, or everyday life, on two different levels. He claimed that only through the process of transcendental epoche - "radical completely unprejudiced reflection" (Bernstein, 1976:133) - can the underlying structures of the world be uncovered and examined. At another level, however, he noted that the underlying structures could be accepted as a given and the social scientist could instead concentrate on producing detailed description of the phenomena of everyday life.

According to Mennell (1974:45), the influential work of Alfred Schutz synthesizes Husserl's phenomenology with Weber's notion of subjective meaning and his development of verstehen as method. Schutz argues, after Husserl, that the

primary goal of the social sciences is "to obtain organized knowledge of social reality [or the life world] ... the way in which this social reality is constituted and maintained" (Bernstein, 1976:137-138). Like Dilthey, however, Schutz believes that social science investigation should be governed by conventional scientific principles and procedures but should also employ *verstehen* as "a method peculiar to the social sciences" (Bernstein, 1976:139). The social scientist first writes detailed description of certain everyday phenomena, based on the available empirical data, then develops ideal types - second-order constructs that attempt to typify the described structures and relations. These constructs are the social scientist's interpretation of the actors' understanding of their own actions.

Schutz is very concerned that these constructs be "objective" and verifiable (Phillipson, 1972:144; Bernstein, 1976:140). To this end he proposes three criteria that should be met: the constructs or theories must be clear and logically consistent; they must take into account the concept of subjective interpretation; and they must demonstrate adequacy as explanations that make sense to the actors whose actions are being typified. Schutz does not offer any practical advice on the means of achieving these criteria. Moreover, as Phillipson (1972:150-152) points out, there are numerous philosophical and technical barriers to the achievement of this ideal combination of criteria. Nonetheless, this combination of criteria does represent a re-orientation of the scientific ideal, one that acknowledges differences between studying natural-science phenomena and studying people.

The challenges to the positivistic attitude that have been represented by the works of Dilthey, Weber, Husserl and Schutz are grounded in a recognition that the situation of a scientist - a human being - who studies non-human ("natural science") phenomena is different from the situation of a

scientist - a human being - who is studying human phenomena. Not only do human subjects have characteristics that distinguish them from the non-human subjects of the natural sciences, but also the relation of the scientist to his or her subjects is different. With the acknowledgement of the human intellect and emotions as an intrinsic part of social science investigation came the shift of attention from explaining to understanding. There also came the idealist notion of a socially constructed reality. Detailed descriptions of actions, their meaning to the actors, and their contexts became the empirical basis for a new scientific method. And taking this orientation to one logical end, Schutz proposed the postulate of adequacy as a new means and measure of scientific validation.

Critical Reflection as Method

To this point, we have considered scientific inquiry as it is viewed from two fundamentally contrasting perspectives. Theorists with a positivistic attitude minimize the differences between the natural and social sciences and exclude the realm of metaphysics from scientific investigation. The use of the scientific method as the means of ensuring validity leads to the union of epistemology and methodology. Interpretive theorists regard people's life-worlds as intersubjective artifacts or ideas. They assert that the life-world is quite different from, and should be investigated quite differently from, the world of natural science. Validity is determined on the basis of intersubjective understanding and acceptability. We agree with Smith and Heshusius (1986) that these two perspectives have mutually exclusive ontologies and epistemologies.

Critical theorists have a different orientation towards scientific inquiry and the assessment of validity. The leading contemporary proponent of critical theory is

Jurgen Habermas, who draws on diverse intellectual traditions. His notion of emancipatory interests provides the logical basis for his critique of society and of the social sciences. Indeed this notion of emancipatory interests introduces a specifically normative dimension of analysis. He distinguishes "what is" from "what ought to be."

Habermas (1971:74-75) argues against the positivistic separation of fact and value. His refusal to accept that separation is basic to his critique of knowledge, its generation and assessment. Fischer (1985:233) states the position this way: "...even the constitution of a fact, let alone a theory, is inherently tied to value assumptions lodged (explicitly or implicitly) in the foundations of the researcher's theoretical and ideological orientation." The first step, then, towards a critical theory is to accept that the research process is value-laden.

Habermas (1971) contends that different but interrelated types of knowledge interests underlie various acts of inquiry. He identifies three frames of reference that guide inquiry. To each frame of reference he links a particular knowledge interest, or "interest in knowing." In the empirical-analytical sciences knowledge is generated through the application of certain accepted "scientific" procedures. The primary cognitive interest of these sciences is technical. That is, knowledge is generated in order to increase society's control over social and natural processes. In the historical-hermeneutic sciences knowledge is generated through the process of interpretive, or hermeneutic, understanding. The primary cognitive interest of these sciences is practical. That is, knowledge is generated in order to increase society's understanding of social processes and the social world. Habermas (1971:303) argues that while these two approaches are grounded in different ontologies, they share a common focus. Research done within these two frames of reference seeks to describe

the structures of the world - for example, social relations - whatever the ontological status of that world may be.

Critically oriented social scientists look beyond the descriptions of structured social relations. They emphasize, instead, the use to which the knowledge is or will be put. The primary cognitive interest of these sciences is emancipatory. That is, knowledge is generated in order to create a better (more just) society. The focus within this frame of reference is on critical reflection about existing structures and relations with a view to transforming those structures and relations (Habermas, 1971:308-311).

Habermas (1979) points out that the existence of a speech community is a necessary condition for the existence of the empirical-analytical and the historical-hermeneutical sciences. Thus, he identifies language as the foundation for all human communication and interaction. He (Habermas, 1979:178-206) suggests that, in advanced industrial societies, communications are frequently distorted for ideological purposes. According to Forester (1980:276), Habermas "seeks to contrast these [distorted communications] with the ordinary, common sense communication of mutual understanding and consensus which makes any shared knowledge possible in the first place." Habermas (1979:2-5) identifies four pragmatic norms, or standards, of undistorted, or valid, communication. The recognition that a communication is valid is based on its "comprehensibility, truth, truthfulness, and rightness" (Habermas, 1979:3). In other words, a speaker must share something that he or she believes to be true, and must express himself or herself truthfully, understandably, and appropriately given the particular context. Mutual understanding and, potentially, agreement depend on the belief that these norms, or validity claims (Habermas, 1979:2), are being satisfied.

Critical theorists seek undistorted communication about the world and within the world. For Habermas (in

Bernstein, 1976:214), the critical sciences have three goals: "true statements," "authentic insights," and "prudent decisions." The first result from truly rational inquiry. The second are achieved when the subjects of the inquiry reflect critically on the first. The third occur when these subjects appropriate, or act on, their insights. This process of enlightenment and action constitutes the primary validation of theory (true statements).

The Conversation Continues

After considering these diverse perspectives on social inquiry, what conclusions might we contribute to a conversation about method and validity? The most obvious point is that recent attempts to reconcile the different approaches to research must, upon careful examination, be discounted. Those who contend that inquiries rooted in positivistic ways of knowing can incorporate interpretive perspectives are overlooking the assumptions which underlie each approach. So are those who graft a positivistic procedural emphasis onto interpretive studies. Researchers from the two frames of reference may investigate similar phenomena, but they will ask different questions and approach the study in different ways. They cannot ask the same questions for their assumptions about the social world are different.

The use of the terms qualitative and quantitative has masked these fundamental distinctions. There is no inherent parallelism between qualitative and interpretive or between quantitative and positivistic. Qualitative research can be as positivistic as quantitative approaches. But interpretive and positivistic research are mutually exclusive.

Morgan (1983b), after Feyerabend, suggests that we lack an external frame of reference to judge the validity of

insights generated within the various research perspectives. He (Morgan, 1983c:383) argues that we should proceed from the recognition that knowing involves diversity and uncertainty. Researchers within any frame of reference need to reflect carefully on the assumptions which underlie their orientation to the social world, and not presume that there is an ultimate truth out there somewhere. Morgan (1983d:397) points out, for example, that the proposal to replace positivistic research with interpretive research lacks credibility, for it suggests that we *know* a proper way of knowing. From Morgan's relativistic perspective, all we can say is that there are diverse ways of approaching social inquiry.

Critical theory, on the other hand, offers a constructive way out of Feyerabend's anarchistic, "anything goes," mindset. Or so it seems to us. The third knowledge interest - emancipatory - provides a framework within which knowledge and its generation may be examined anew. Critically oriented social scientists would force an on-going dialogue. Members of the research community would challenge one another with the implications of their respective choices regarding research questions and modes of inquiry. This dialogue would necessarily uncover differing logics of justification and confront their related assumptions about validity.

Fischer (1985) illustrates the potential of this framework by undertaking a "critical evaluation" of a public policy. He reviews from a critical perspective the well-known debates regarding the evaluation of Project Headstart. His definition of a critical evaluation is "one that systematically examines the full range of empirical and normative assumptions that contribute to a particular judgment" (Fischer, 1985:242). Such an evaluation consists of four stages at two levels of discourse.

At the level of first-order discourse, validity is approached according to the conventions of positivistic and

phenomenological research. The first phase of evaluation, the technical verification of program objectives, is empirical and analytic; procedures such as repeated observations, experimentation, measurement and hypothesis testing are employed. The next phase, the situational validation of policy goals, draws on the historical-hermeneutic traditions; the focus is on ascertaining the "social relevance and the logic of the situation" (Fischer, 1985:244) from the actors' point of view. At this level, the underlying value system of a given social world is not questioned.

Critically oriented evaluators then move to second-order discourse. There, the value system or ideology implicit in the first-order discourse is challenged. The implications of those values for the larger social order are examined. During the third phase of evaluation, the systems vindication of value orientations, the evaluator seeks empirical evidence regarding the "physical, social and psychological consequences" (Fischer, 1985:246) of a given political system. The fourth phase of evaluation, rational social choice, involves articulating alternatives to the existing system. Then, arguments may be made in favor of a particular alternative.

The progression through the four stages of a critical evaluation represents a gradual shift in the conceptualizations of method and of validity. Fischer illustrates this progression in his Project Headstart analysis. The initial evaluations of Headstart were confined strictly to technical verification. Many critiques of those evaluation reports raised positivistic issues of procedure. Other critiques, however, were concerned with the appropriateness of the evaluation criteria given the purpose and context of the program. According to Fischer's analysis, the latter were questions of validation. A little-debated value orientation of the Headstart Project and evaluations was the thesis that there is a culture of

poverty. Empirical evidence to support that thesis is scarce, apparently. In the fourth evaluatory phase - rational social choice - Fischer (1985:250) argues that the definition of "the good society" was the fundamental issue. Those supporting the notion of a meritocracy favored certain approaches to the evaluation of Headstart while those supporting the notion of an egalitarian community favored other approaches. Fischer's analysis does show that technical verification is only one component of the evaluation of a policy.

With respect to the Headstart debate, Fischer (1985:252) comments that "most critics appear to be talking past one another." Fischer's own intention is to show both the independence and the interrelatedness of the various modes of inquiry. He emphasizes the importance of identifying "the logical connections between empirical and normative discourse in specific policy arguments" (Fischer, 1985:253). He sees a need for evaluators to make public both their empirical findings and the assumptions which underpin their choices of criteria. In a sense, Fischer is attempting to turn a series of monologues into a conversation.

As students of educational administration, we find Fischer's article particularly relevant to our own situations. He has taken an area of central importance to educational administration - policy analysis - and has made more concrete the application of a critically oriented perspective on the social world. In so doing he has made us aware of a way in which differing conceptions of social science, while not reconcilable, can be incorporated as components within a comprehensive framework of analysis.

There is a very strong message in this debate for institutions purporting to educate new generations of social scientists. Students of social inquiry must be provided with a grounding in the diverse perspectives on the nature of the social world. The assumptions underlying methods of

investigation *must* be exposed to critical scrutiny. What may have been taken for granted in the past *must* be made problematic. May informed conversations on these subjects continue.

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